

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

- **Federal Agency Name(s):** Office of Global Programs (OGP), Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC) (In collaboration with NSF)
- **Funding Opportunity Title:** Joint Announcement on Climate Variability and Human Health for FY 2004
- **Announcement Type:** Initial Announcement
- **Catalog of Federal Domestic Assistance (CFDA) Number(s):** No. 11.431, Climate and Atmospheric Research, NOAA; No. 47.050, Geosciences, NSF;
- **Dates:** Pre-proposals must be received by OGP no later than 5 p.m. Eastern Time February 27, 2004. Full proposals must be received at the Office of Global Programs no later than 5 p.m. Eastern Time April 23, 2004.
- **Application Submission:** All submissions should be directed to: Office of Global Programs (OGP); National Oceanic and Atmospheric Administration (NOAA), Attn: Diane S. Brown, Grants Manager, 1100 Wayne Avenue, Suite 1210, Silver Spring, MD 20910.

Funding Opportunity Description: With the intent of stimulating integrated multidisciplinary studies and enhancing institutional collaboration, National Oceanic Atmospheric Administration (NOAA) and the National Science Foundation (NSF) announce our interest in receiving research proposals to improve understanding of the human health consequences related to climate variability and enhance the integration of useful climate information into public health policy and decision-making. This joint announcement is intended to support the formation of multidisciplinary teams working in close collaboration on integrated projects to illuminate the human, biological, and physical pathways by which climate may affect human health, and which explore the potential for applying climate and environmental information toward the goal of improved public health. We are also interested in understanding how the human health impacts and responses, on shorter time scales (i.e. seasonal, annual, decadal), affect our knowledge of vulnerability and adaptation to longer-term changes in the climate system.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The over-arching goal of this announcement is to develop and demonstrate the feasibility of new approaches that investigate or validate well-formed hypotheses or models of climate variability and health interactions. Development of decision-support tools for public health application is also a priority. This announcement is offered as part of an interagency effort to build an integrated climate and health community. Proposed research submitted under this announcement is encouraged to build on existing research activities, programs, research sites and facilities, or data sets.

B. Program Priorities

With the intent of stimulating integrated multidisciplinary studies and enhancing institutional collaboration, National Oceanic Atmospheric Administration (NOAA) and the National Science Foundation (NSF) announce our interest in receiving research proposals to improve our understanding of the human health consequences related to climate variability and enhance the integration of useful climate information into public health policy and decision-making. This joint announcement is intended to support the formation of multidisciplinary teams working in close collaboration on integrated projects to illuminate the human, biological, and physical pathways by which climate may affect human health, and which explore the potential for applying climate and environmental information toward the goal of improved public health. We are also interested in understanding how the human health impacts and responses, on shorter time scales (i.e. seasonal, annual, decadal), affect our knowledge of vulnerability and adaptation to longer term changes in the climate system.

Investigators should also plan to participate in an annual meeting of researchers funded under this announcement. This meeting will be organized by the funding partners and is intended to facilitate midpoint discussions of research and methodology as well as presentations of final research results. The participation of other team members, particularly new researchers at the graduate and postdoctoral level, is highly encouraged.

Research teams should include, at a minimum, one investigator from the public health or medical response field as part of an interdisciplinary team of physical, biological and social scientists working in close collaboration on an integrated project. In addition to the program objectives listed above, research proposals submitted under this announcement are strongly encouraged to:

- (1) include components addressing either the adaptation or vulnerability of human and public health systems to climate variability,
- (2) conduct economic analysis of using climate information for public health decision-making and/or,
- (3) evaluate the effect of using climate information in the public health arena on budgetary, planning, and preparedness operations.

The funding partners will look favorably on research activities that involve end-users from the public health arena (i.e., local public health officials, regional or international health organizations, other public health or disaster management agencies and institutions) and which address the means by which public health policy and decision-makers can use their research results. Investigators are encouraged to demonstrate that they will disseminate research results through formal presentation during at least one professional meeting and publication in a peer-reviewed journal. This Program Announcement is for projects to be conducted by investigators both inside and outside of NOAA and NSF.

C. Background Information for Priority Setting

Published in 2001, the U.S. National Research Council (NRC) report "Under the Weather: Climate, Ecosystems and Infectious Disease" highlights the need for strengthening research on the linkages between climate and infectious disease and recommends highly interdisciplinary collaboration involving modelers, meteorologists, climatologists, ecologists, social scientists, and a wide array of medical and public health professionals. The report recognizes that the effectiveness of disease early warning systems will depend upon the context in which they are used, and recommends that the development of such systems should involve the active participation of the system's end users.

Also, the U.S. National Assessment of the Potential Consequences of Climate Variability and Change, Health Sector Report, published in 2000, calls for a greater scientific understanding of the causal relationships between climate and human health, and the need to take an interdisciplinary approach that actively involves decision-makers and practitioners. Several multi-agency sponsored workshops such as the American Academy of Microbiology Colloquium on Climate Variability and Human Health: An Interdisciplinary Perspective, and the workshop on Climate Change and Vector-borne and other Infectious Disease: A Research Agenda, called for cross-agency collaboration in supporting integrated research in this emerging discipline. The 1999 NRC report, Global Environmental Change: Research Pathways for the Next Decade, recognizes that climate may have important impacts on human health but that further study is necessary, and that such studies must also address issues of social vulnerability and adaptability.

It is well recognized that although early research has demonstrated a connection between climate and health in some cases, more rigorous and interdisciplinary research is required. This, coupled with an evolving capacity to understand and predict natural changes in the climate system, and a desire to develop and provide climate and

environmental information for social benefit, particularly in the public health sector, has driven demand for improved understanding of the relationship between climate variability and human health. Both the scientific research results and recommendations stemming from various reports and meetings highlight the complexity of the research questions and the need for a coordinated multi-agency and interdisciplinary approach. The very nature of the research required cuts across disciplinary boundaries, and spans a range of agency missions and mandates and private sector interests.

The NOAA Office of Global Programs is interested in the effective use of climate information in climate-sensitive sectors. The NSF focuses on broadly based fundamental research to improve understanding of the Earth system. This announcement is offered as an experimental mechanism to fill critical gaps in climate variability and human health research and to coordinate funding of overlapping agency and institutional interests in such research.

Other private sector organizations interested in jointly funding research through this announcement process should contact the NOAA Acting Program Manager, Juniper Neill (301) 427-2089, ext. 176, or Internet: juniper.neill@noaa.gov.

D. Program Authority

NOAA Authority: 15 U.S.C. 2931 et seq.; (CFDA No. 11.431)--Climate and Atmospheric Research. NSF Authority: 42 U.S.C. 1861-75; (CFDA No. 47.050)--Geosciences

II. Award Information

A. Funding Availability

NOAA and NSF believe that research on the relationship between climate variability and human health will benefit significantly from a strong partnership with outside investigators. An estimated \$1 million may be available for FY04. Current plans assume that over 50% of the total resources provided through this announcement will support extramural efforts, particularly those involving the broad academic community. Funding may be provided by NOAA or NSF. In previous years, three to seven grants have been awarded ranging from \$50,000 to \$250,000 per year. Past or current grantees funded under this announcement are eligible to apply for a new award which builds on previous activities or areas of research not covered in the previous award. Current grantees should not request supplementary funding for ongoing research through this announcement.

B. Project/Award Period

Projects may be conducted for up to a three year period.

C. Type of funding instrument

The funding instrument for extramural awards will be a grant unless it is anticipated that any of the funding entities will be substantially involved in the implementation of the project, in which case the funding instrument should be a cooperative agreement. Examples of substantial involvement may include but are not limited to proposals for collaboration between a funding entity or funding entity scientist, and a recipient scientist or technician and/or contemplation by NOAA or NSF of detailing Federal personnel to work on proposed projects. NOAA and NSF will make decisions regarding the use of a cooperative agreement on a case-by-case basis.

III. Eligibility Information

1. Eligible Applicants

Participation in this competition is open to all institutions eligible to receive support from NOAA and NSF. For awards to be issued by NOAA, eligible applicants are institutions of higher education, hospitals, other nonprofits, commercial organizations, foreign governments, organizations under the jurisdiction of foreign governments, international organizations, state, local and Indian tribal governments and Federal agencies. Applications from non-Federal and Federal applicants will be competed against each other. Proposals selected for funding from non-Federal applicants will be funded through a project grant or cooperative agreement under the terms of this notice. Proposals selected for funding from NOAA employees shall be effected by an intragency funds transfer. Proposals selected for funding from a non-NOAA Federal Agency will be funded through an interagency transfer. Before non-NOAA Federal applicants may be funded, they must demonstrate that they have legal authority to receive funds from another federal agency in excess of their appropriation. Because this announcement is not proposing to procure goods or services from applicants, the Economy Act (31 U.S.C. 1535) is not an appropriate legal basis.

2. Cost Sharing or Matching Requirement

This program does not require matching share.

IV. Application and Submission Information

1. Address to Request Application Package

Applicants may obtain a standard NOAA application kit from the OGP's Web page at: <http://www.ogp.noaa.gov/grants/appkit.htm> or from Diane S. Brown at the Program Office (301) 427-2089 X107. The text of the full funding opportunity announcement can be accessed at OGP's website: <http://www.ogp.noaa.gov> or the central NOAA site: www.ofa.noaa.gov/~amd/SOLINDEX.HTML. This announcement will also be available through Grants.gov at <http://www.Grants.gov>.

2. Content and Form of Application Submission

Pre-Proposals:

Pre-proposals can be submitted electronically to ogpgrants@noaa.gov, unless other arrangements have been made with the Acting Program Manager. Pre-proposals must be no longer than eight pages in length and must be prepared using an 11 point font or larger, with one-inch margins. Pre-proposals longer than eight pages, with smaller fonts, or with attachments will not be accepted. The Program Officers will evaluate the pre-proposals. Submission of pre-proposals is not a requirement, but it is in the best interest of the applicants and their institutions. Email submissions are acceptable for pre-proposals only. Projects deemed unsuitable during pre-proposals review will not be encouraged to submit full proposals. Investigators who are not encouraged to submit full proposals will not be precluded from submitting full proposals.

Pre-proposals should include:

- (1) the names and institutions of all investigators;
- (2) a statement of the problem;
- (3) a description of data and methodology including names of data sets and types of models or analysis;
- (4) a general budget for the project;
- (5) a description of intended use of results for public health policy and decision making; and
- (6) brief biographical sketches for each investigator.

Full Proposals:

- (1) Proposals submitted to the NOAA Climate and Global Change Program must include the original and two unbound copies of the proposal, including federal forms.
- (2) Investigators are requested to submit 6 additional paper copies and/or a PDF version of the proposal submitted electronically to ogpgrants@noaa.gov. Investigators are requested to submit sufficient proposal copies to facilitate the full review if they wish all reviewers to receive color, unusually sized (not 8.5 x 11”), or otherwise unusual materials submitted as part of the proposal.
- (3) Proposals, excluding appendix, must be limited to 30 pages (numbered), 11 point font or larger and 1 inch margins, including abstract, team organization chart, results of prior research, statement of work, budget justification, and budget. Federally mandated forms are not included within the page count.
- (4) Proposals should be submitted to: NOAA Office of Global Programs, Attn: Diane S. Brown, Grants Manager, 1100 Wayne Avenue, Suite 1210, Silver Spring, MD 20910.
- (5) Facsimile transmissions and electronic mail submission of full proposals will not be accepted.

Required Elements: All proposals must include the following elements:

- (1) Signed title page: The title page must be signed by the Principal Investigator (PI) and the institutional representative. If more than one investigator is listed on the title page, please identify the lead investigator. The PI and institutional representative should be identified by full name, title, organization, telephone number and address. The amount of Federal funds being requested should be listed for each budget period and for the total project.
- (2) Abstract: An abstract must be included and should contain an introduction of the problem, rationale and a brief summary of work to be completed. The abstract should appear on a separate page, headed with the proposal title, lead institution(s), principal investigator(s), total proposed cost and budget period.
- (3) Research team organization chart: All researchers should be listed with roles and contact information.
- (4) Results from prior research: The results of related research activities should be described, including their relation to the currently proposed work. Reference to each prior research award should include the title, agency or institution, award number, PIs, period of award and total award. The section should be a brief summary and should not exceed two pages total.
- (5) Statement of work: The proposed project must be completely described, including identification of the problem, scientific objectives, proposed methodology, and relevance to the announcement. Benefits of the proposed project to the general public and the scientific community should also be discussed. A summary of proposed work must be included clearly indicating that the proposed work is achievable. The statement of work, including references but excluding figures and other visual materials must not exceed 15 pages of text.
- (6) Budget Justification: A brief description of the expenses listed in the budget and how they address the proposed work. Itemized justification must include salaries, equipment, publications, supplies, tuition, travel, etc.
- (7) Budget: the proposal must include total and annual budget corresponding with the descriptions provided in the statement of work. A sample budget sheet can be found in the standard NOAA application kit-Federal Applicants must submit a Standard Form 424 (9-2003) "Application for Federal Assistance", including a detailed budget using the Standard Form 424a (9-2003). "Budget Information--Non-Construction Program". The form is included in the standard NOAA application Kit. Additional text to justify expenses should be included as necessary.

Appendix (not included in 30 page limit):

- (8) Vitae: Abbreviated curriculum vitae are sought with each proposal, not to exceed 3 pages per person. Reference lists should be limited to 10-15 of the most recent and relevant publications with up to five other relevant papers.
- (9) Current and pending support: for each investigator, submit a list that includes project title, supporting agency with grant number, investigator months, dollar value and duration. Requested values should be listed for pending support.
- (10) List of suggested reviewers: The cover letter may include a list of individuals qualified and suggested to review the proposal. It also may include a list of individuals that applicants would prefer to not review the proposals. Such lists may be considered at the discretion of the Program Officers.

- (11) All applications must have a DUNS (Dun and Bradstreet (D&B) Data Universal Numbering System when applying for Federal grants on or after October 1, 2003. No application is deemed complete without the DUNS number and only OMB may grant exceptions.

3. Electronic Submission

Pre-proposals may be submitted electronically, at ogpgrants@noaa.gov. Full proposals may not be submitted electronically; all applications shall be submitted in paper format.

4. Submission Dates and Times

Unless otherwise noted, strict deadlines for submission to the FY2004 process are: Pre-proposals must be received by OGP no later than 5 p.m. Eastern Time February 27, 2004. Full proposals must be received at the Office of Global Programs no later than 5 p.m. Eastern Time April 23, 2004. Proposals received after that time will not be considered for funding. OGP determines whether an application has been submitted before the deadline by date/time stamping the applications as they are physically received in the OGP office. Applicants who have not received a response to their pre-proposal within four weeks should contact the Acting Program Manager: Juniper Neill (301) 427-2089, ext. 176 or by email at juniper.neill@noaa.gov. The time from target date to grant award varies. We anticipate that review of full proposals will occur in May 2004, for most approved projects. September 1, 2004, may be used as the earliest proposed start date on the proposal, unless otherwise directed by the Acting Program Manager. Applicants should be notified of their status within four months of full proposal submission.

5. Funding Restrictions

No special restrictions apply.

6. Other Submission Requirements

None.

V. Application Review Information

A. Criteria

1. Importance/Relevance and Applicability of Proposal (30%)

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. For the Climate Variability and Human Health Program competition, this includes supporting the formation of multi-disciplinary teams working in close collaboration on integrated

projects to illuminate pathways by which climate may affect human health, and exploring ways to apply climate information toward the goal of improved public health.

2. Technical/Scientific Merit (40%)

This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives. For the Climate Variability and Human Health Program competition this includes methodology and proof of data quality and availability.

3. Overall Qualifications of Applicants (10%)

This criterion assesses whether the applicant, and team members, possess the necessary education, experience, training, facilities, and administrative resources to accomplish the project.

4. Project Costs (10%)

This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time-frame.

5. Outreach and Education (10%)

This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. For the Climate Variability and Human Health Program competition this includes explicit multidisciplinary participation and collaboration with stakeholders and public health officials for the development and use of research applications by the climate, ecology and health, and public/environmental health communities.

B. Review and Selection Process

1. Initial Evaluation of the Applications

Once a full application has been received by OGP, an initial administrative review is conducted to determine compliance with requirements and completeness of the application.

2. Review Panel

Full proposals will undergo independent peer panel review and may receive independent peer mail review. The independent peer mail reviewers rate each proposal according to the above Criteria for Evaluation. Each independent peer panel review member will rate the proposals using the above-mentioned criteria and taking the mail reviews into consideration. Both agency and non-agency experts in the field may be used in this

process. The technical reviewers will give no consensus advice. The proposals will be ranked according to their average score assigned by the independent peer panel.

C. Selection Factors

The Program Managers shall award in the rank order unless a proposal is justified to be selected out of rank order based upon one or more of the following factors:

1. Availability of funding
2. Balance/distribution of funds
 - a. Geographically
 - b. By type of institutions
 - c. By type of partners
 - d. By research areas
 - e. By project types
3. Duplication of other projects funded or considered for funding by NOAA or other federal agencies
4. Program priorities and policy factors
5. Applicant's prior award performance
6. Partnerships with/participation of targeted groups

Factor 1 includes whether a proposal maximizes use of available funds and whether a proposals' costs fall within remaining funds available; Factor 3 includes duplication of proposals submitted in response to this announcement; Factor 4 includes whether a project duplicates funding already provided by non-federal sources.

The Selecting Official makes final recommendations for award to the Grants Officer who is authorized to obligate the funds.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of proposals will occur during the two months following the date given in this announcement that the full proposals are due to the OGP. Funding should begin during fall 2004 for most approved projects. Projects should not be expected to begin prior to September 1, 2004, unless otherwise directed by the Acting Program Manager.

VI. Award Administration Information

A. Award Notices

Successful applicants will receive notification that the application has been recommended for funding to the NOAA Grants Management Division. This notification is not an authorization to begin performance of the project. Official notification of funding, signed by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be issued to the Authorizing Official and the Principle Investigator of the project. Unsuccessful applicants will be notified that their proposal was not selected

for recommendation. Unsuccessful applications will be kept on file in the Program Office for a period of at least 12 months, then destroyed.

B. Administrative and National Policy Requirements

Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements published in the Federal Register on October 1, 2001 (66 FR 49917), as amended by the Federal Register notice published on October 30, 2002 (67 FR 66109). You may obtain a copy of these by notices by contacting the agency contact(s) under Section VII, or by going to the website at:

www.access.gpo.gov/su_docs/aces140.html.

Applicants whose proposed projects may have an environmental impact should furnish sufficient information to assist proposal reviewers in assessing the potential environmental consequences of supporting the project.

C. Reporting

Award recipients will be required to submit financial and performance (technical) reports. All financial reports shall be submitted in triplicate (one original and two copies) to the NOAA Grants Officer. Performance reports should be submitted to the NOAA/OGP Acting Program Manager. Electronic submission of performance reports is preferred. All reports will be submitted on an annual schedule. The first technical progress report of a multi-year award is due 9 months after the start date of the award. The comprehensive final report is due 90 days after the award expiration.

VII. Agency Contact(s)

Please visit the Office of Global Programs website for further information <http://www.ogp.noaa.gov> or contact Diane S. Brown, Grants Manager, at the Office of Global Program (OGP), National Oceanic and Atmospheric Administration, 1100 Wayne Avenue, Suite 1220, Silver Spring, MD 20910-5603; or by phone at 301-427-2089, ext. 107, or fax to 301-427-2222, or via internet at ogpgrants@noaa.gov.